

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007713**Date Inspected:** 15-Jul-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wu Zhi Cheng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 5BW

This QA Inspector observed grinding of tack welds on Corner Assembly Side plates at the location Suspender Bracket was fit up.

Segment 1AAW

This QA Inspector observed grinding of bevel groove face on the bottom plate along the 1AAW/1AW Transverse Complete Joint Penetration splice weld.

Segment 1AE

This QA Inspector observed grinding of the open rib ends after flame cutting for bevel panel point 8.5.

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## WELDING INSPECTION REPORT

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### Segment 3BE

This QA Inspector observed flame cutting of the cross beam bottom plate splice plate with a mechanically guided torch.

### Segment 3AE

This QA Inspector observed ZPMC NDT Technician performing Magnetic Particle Testing (MT) of the corner assembly Deck Plate to Edge Plate CJP splice hold back weld at the 3AE/2BE connection.

This QA Inspector observed ZPMC NDT Technician performing MT of base metal where fit up plates were removed along the transverse CJP splice weld on the cross beam side along the 3AE/2BE connection.

### Bay 11

This QA inspector witnessed the lot testing of A325 High Strength Bolts to determine the torque values for the minimum tension required. Listed below are the lots tested and the determined average torque value. Rotational capacity test was also performed with the same lot numbers.

Lot Number: DHGM270002- Average torque value: 840 N.m

Lot Number: DHGM270001- Average torque value: 853 N.m

Lot Number: DHGM270011- Average torque value: 820 N.m

Lot Number: DHG60580- Average torque value: 340 N.m

Lot Number: DHG60582- Average torque value: 0 N.m (Lot failed)

Lot Number: DHG60581- Average torque value: 0 N.m (Lot failed)

Lot Number: DHG60583- Average torque value: 0 N.m (Lot failed)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hernandez,Dan
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Carreon,Albert
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QA Reviewer
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